

REMARKS

Claim Rejections - 35 USC § 102/35 USC § 103(a)

The claims of the application are rejected under 35 U.S.C. § 102 and 35 U.S.C. § 103(a) over Matsumura et al., JP 2001-294445 ("Matsumura"), alone and in combination with various teaching references. Each of these rejections is based on the premise that Matsumura discloses each of the components of the paste composition of the present invention in the correct sizes. (Action, page 8, lines 5-6).

The claims of the present application have been amended to limit the resin of the paste composition of the present invention to a thermosetting resin. Support for this limitation is found in the specification on page 22, lines 13-16.

Matsumura, on the other hand, does not disclose a composition containing a thermosetting resin. Matsumura discloses that "[t]he binder resin substrate is not particularly limited as long as it is a resin which ... is quickly heat-decomposing and evaporative." {Paragraph [0020]}. Cellulose type resins and acrylic resins are exemplified as suitable resins. The acrylic resin is more particularly described in paragraph [0020] as a copolymer containing at least an acrylic type monomer among the polymerizing components. Nowhere does Matsumura disclose or suggest that the

acrylic copolymer is a thermosetting resin. In the examples, "Joncryl" 611 is used as the acrylic polymer (Paragraph [0028]). "Joncryl" 611 is a thermoplastic resin having a softening point of 112°C and a Tg of 50°C (see attached catalog).

The Office notes in the Action that Matsumura discloses that the resin can be made from a glycidyl acrylate monomer which makes epoxy resins. Copolymers containing glycidyl acrylate are not necessarily epoxy resins and are not necessarily thermosetting resins. Glycidyl acrylate is described in Matsumura as an example of a component of a copolymer that can be pyrolyzed. Therefore, the monomer is not used to make an epoxy, i.e., thermosetting, resin in Matsumura.

Removal of the rejections based on Matsumura is in order and is respectfully requested.

The foregoing is believed to be a complete and proper response to the Office Action dated August 5, 2008, and is believed to place this application in condition for allowance. If, however, minor issues remain that can be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number indicated below.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of

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RESPONSE UNDER 37 C.F.R. §1.111

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time. The fee for any such extension may be charged to Deposit
Account No. 111833.

In the event any additional fees are required, please also
charge Deposit Account No. 111833.

Respectfully submitted,

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Old Grade Acrylic Resins for Pigment Dispersions

Functionality	Acid No.	Density (lbs/gal)	Softening Point (°C)	T _g (°C)	Description and Applications
Carboxyl	213	9.5	143	73	Alkali-soluble, high molecular weight resin. Good for pigment chipping and prescale dispersion.
Carboxyl	108	9.4	115	60	Alkali-soluble, lower acid resin. Recommended as a dispersant in waterborne coatings. Also available as JONCRYL 58, a 27% solids solution of ammoniacal water n-propanol.
Carboxyl	53	9.2	112	52	Solvent-soluble, compatible with most resins for fast dry, high gloss and high solids at low viscosity. Useful for dispersion of organic pigments and carbon black with good stability.
Carboxyl	274	9.3	173	128	Alkali-soluble, mid-range molecular weight resin. Recommended as a pigment dispersant in waterborne coatings.
Carboxyl	215	9.4	165	109	Alkali-soluble, high molecular weight acrylic resin. Excellent efficacy for chip quality aqueous dispersions.
Carboxyl	240	9.2	155	102	Alkali-soluble, high molecular weight acrylic resin. Excellent efficacy for chip quality aqueous dispersions.

Solvents of Waterborne Coatings

Type	Wax Particle (µm)	Solids (wt %)	pH	Viscosity (cP)	Freeze (°C)	Density (lbs/gal)	Thaw Stable	Description and Applications
Opaque Emulsion	4,000	40	1,000	9.0	7.7	No	No	Polyethylene wax emulsion imparting excellent mar, scuff and rub resistance at lower use levels than typical wax emulsions.
Translucent Emulsion	53	26	10	9.8	8.2	No	No	Fine particle size wax improves mar, early block and water resistance. Normal levels will not affect gloss, clarity or appearance of coating.
Hazy Emulsion	93	34	400	9.0	8.1	No	No	Improves mar and scuff resistance. High levels will impart water beading and reduce gloss.
Aqueous Ammonia Solution of Zinc Ions	15	5	11.4	10.1	Yes	Yes	Yes	Crosslinking agent reacts with free acid groups of polymer. Modification improves early water, self spray and block resistance of the coating.